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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,215	12/08/2000	Badri N. Prasad	6944	3483

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DORSEY & WHITNEY LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
50 SOUTH SIXTH STREET  
MINNEAPOLIS, MN 55402-1498

EXAMINER

BUI, KIM T

ART UNIT	PAPER NUMBER
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3626

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/733,215

Applicant(s)

PRASAD ET AL.

Examiner

Kim T. Bui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/5/2001, 4/21/2003</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow

apply, involve, use, or advance the technological arts. The body of the claim(s) must recite how the technological art is employed to produce a useful, concrete and tangible result in a non-trivial manner.

(A) In the present case, claims 1-30 recite an abstract idea only. The recited steps of the claims are merely for searching the claims to identify flag, for identifying driving cost from claims, filtering high cost members, generating display of data file, and do not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The step for generating data file and for displaying flag or portion of data file are trivial and do not describe how the technological art is employed to produce a useful, concrete and tangible result in a non-trivial manner.

In addition, for a claimed invention to be statutory, it must produce a useful, concrete, and tangible result. In the present case, the claimed invention produces a method for analyzing claims to identify identifying cost and intervention flags (i.e., repeatable) used in proactive care (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1-30 deemed to be directed to non-statutory subject matter

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the

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United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 6, 8,10,11,13,16, 20, 21, 24, 25 are rejected as being anticipated by LASH (US 2001/0020229 A1).

(A) As per claim 1, LASH discloses a method for targeting high risk (i.e. high cost) patient of a healthcare plan for proactive care (i.e. preventive), using data from a plurality of claims, the method comprising:

a. searching the plurality of claims to identifying the presence of claims variables (reads on intervention flag). LASH, page 1, paragraph 0010, page 2, paragraph 0024, line 7 to page 3, paragraph 0025, line 3.

b. identifying a medical episode driving cost from o the plurality of claims. LASH, page 1, paragraph 0007, lines 10-27, page 4, paragraph 0036, lines 4-5.

(B) As per claim 16, LASH discloses a method for targeting high risk (i.e. high cost) members amendable to proactive care from a plurality of members of a healthcare plan using information from a plurality of claims corresponding to each of the plurality of members, the method comprising:

a. filtering the plurality of members using a filter criterion to identify a set of high cost members. LASH, page 4, lines 24-33 of paragraph 0037. Figs 2,3A, 3B, paragraphs 0004, 0005, 0007.

b. identifying the presence of an intervention flag (i.e. claim variables) for each member in the set of high cost members, by analyzing the claims corresponding to each member. LASH, Fig. 1, paragraphs 0010, 0024,0025,0038.

c. generating a display showing the intervention flag for each member in association with an identification of the member. LASH, Fig. 1, patients 1-n in association with claim variables A-Z, paragraphs 0024, 0034, page 8, lines 1-8 of claim 12.

(C) As per claim 21, LASH discloses a method for targeting high risk (i.e. high cost) patient of a healthcare plan for proactive care (i.e. preventive), using data from a plurality of claims, the method comprising:

a. filtering the plurality of members using a filter criterion to identify a set of high cost members. LASH, page 4, lines 24-33 of paragraph 0037. Figs 2,3A, 3B, paragraphs 0004, 0005, 0007.

b. identifying a medical episode driving cost from a plurality of claims. LASH, page 1, paragraph 0007, lines 10-27, page 4, paragraph 0036, lines 4-5.

(D) As per claim 2, LASH teaches generating a display showing the intervention flag for each member in association with an identification of the member in Fig. 1, patients 1-n in association with claim variables A-Z, paragraphs 0024, 0034, and page 8, lines 1-8 of claim 12.

(E) As per claim 6, LASH teaches the association between the claim variables with each of the claims associated with the variables. LASH, Fig.1, paragraph 0049, paragraph 0059, lines 9-13 and claim12, lines 1-8.

(F) As per claim 8, LASH teaches the calculation of relative score (read on relative risk) for patient. LASH, paragraphs 0039, 0054, Table 2.

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(G) As per claims 10,11, LASH teaches the various factors for identifying high use patients including do not take medicine (reads on missing treatment) or do things that exacerbate the medical condition (reads on noncompliant). LASH, paragraphs 0040, lines 1-4.

(H) As per claims 13, 20, 24, 25, LASH teaches the high cost, the highest risk, and the determination of intervention flag for individual record. Lash, LASH, Fig. 1, paragraphs 0007, lines 1-5, lines24-27, paragraphs 0010,0038, paragraph 0042,lines 1-5, and page 8, lines 1-8 of claim 12.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3, 4, 5, 7, 9, 17,18,19, 22, 23, 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over LASH (US2001/0020229 A1).

(A) As per claim 27, LASH discloses a method for targeting high risk (i.e. high cost) members amendable to proactive care from a plurality of members of a healthcare plan using information from a plurality of claims corresponding to each of the plurality of members, the method comprising:

a. filtering the plurality of members using a filter criterion to identify a set of high cost members. LASH, page 4, lines 24-33 of paragraph 0037, Figs 2,3A, 3B, and paragraphs 0004, 0005, 0007.

b. identifying the presence of an intervention flag (i.e. claim variables) for each member in the set of high cost members, by analyzing the claims corresponding to each member. LASH, Fig.1 and paragraphs 0010, 0024, 0025, 0038.

c. generating a data file for display showing the number of interventions present for each of the plurality the members in association with an identification of the member. LASH, Fig. 1, paragraphs 0024, 0034, and page 8, claim 12, lines 1-8.

LASH does not explicitly recite the step for selecting one of the high cost members and displaying the portion of corresponding data. However, LASH discloses that data records are organized and analyzed and outputted for each patient of a population, each patient record includes at least identification data and corresponding claim variables data. LASH, paragraph 0011, paragraph 0036, lines 14-16, page 8, claim 12, lines 1-8. It would have been obvious to one having ordinary skill in the art at the time of the invention to select and display these readily available information on the individual basis with the motivation of providing data for use by interested parties such as the MCO or the like. LASH, page 4, lines 14-16 of paragraph 0036.

(B) As per claims 3,18, 26, LASH teaches the factors for intervention including medical diagnosis, self-care, drug history, equipment/monitoring. LASH, paragraphs 0040, 0049. It is readily apparent that medical diagnosis is varied based on the population of patient. It would have been obvious to one having ordinary skill in the art



to include mental care with the motivation of expanding the application of the system.

Lash, paragraph 0021, lines 1-10.

(C) As per claims 4,7,17,22,23, LASH does not explicitly recite “the predicted future cost”. However, LASH teaches that cost data can be included along with other data, and the predictive model is applied to predict high use or high cost patients. LASH, paragraphs 0007,0036, 0037, 0051,0064. It is readily apparent that future cost is a direct function of the predicted high use or high cost patients. It would have been obvious to one having ordinary in the art to include predicted future cost with the motivation of monitoring and reducing medical costs. LASH, paragraph 0042, lines 16-19.

(D) As per claims 5, 9, 19, LASH teaches the intervention flag (i.e. claim variable) can be selected from the group of emergency room visits, hospital admission, number of prescriptions, etc... LASH, paragraphs 0049, 0050, 0010, paragraphs 0040, lines 1-4. LASH fails to recite out of network costs, no appropriate provider, multiple provider specialists. However, LASH teaches that any other claim variables can be used. LASH, paragraph 0024, lines 9-11, paragraph 0049, lines 29-31. It would have been obvious to one having ordinary in the art to include other variables (e.g., out of network cost, multiple provider specialists etc..) with the motivation of expanding the application of the system for the tracking of desired claims information. LASH, paragraph 0024, lines 9-11.

(E) As per claim 28. LASH teaches the high cost, the highest risk, and the determination of intervention flag for individual record. Lash, LASH, Fig. 1, paragraphs

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0007, lines 1-5, lines 24-27, paragraphs 0010, 0038, paragraph 0042, lines 1-5, , and page 8, lines 1-8 of claim 12.

(F) As per claims 29, 30, Lash teaches the calculating of relative scores and the identifying of high cost member based on the claim variables and the analyzed predictive model. LASH, the abstract, paragraphs 0039, 0048, 0054, Table 2.

8. Claim 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over LASH (US2001/0020229 A1) in view of Lockwood et al. (5845254).

(A) As per claims 14, 15, LASH fails to recite the average benchmark cost. However, the use of bench mark to average cost is well known as evidenced by Lockwood et al. Lockwood et al discloses a system for monitoring healthcare performance of providers in which benchmark is used to average cost. Lockwood et al. col. 2, line 32 to col. 3, line 25, col. 13, line 52 to col. 14, line 65. It would have been obvious to one having ordinary skill in the art at the time of the invention to include benchmark with the motivation of determining a reasonable cost range for evaluating and monitoring costs of claims from different providers. Lockwood et al., col. 2, lines 32-47.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over LASH (US2001/0020229 A1) in view of Lutgen et al. (US 2003/0167189A1).

(A) As per claim 12, LASH does not expressly recite CCG categories. However the use of medical code such as CCG to identify medical episode is well known as evidenced by Lutgen et al. Lutgen et al. paragraphs 0023, 0038. It would have been obvious to one having ordinary skill in the art at the time of the invention to include CCG categories with the motivation of conforming to standard practice.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. "Process to reduce the cost of prevention and treatment of ulcers" (US2004/0049408); "System for monitoring a patient population" (US 6385589 B1); " Healthcare treatment planning and assessment" (US 6484144 B2); " Method for improving patient compliance with prescriptions" (US 6578003 B1); " Method for identifying at risk patients" (US 5976082); " Medical claims analysis system" ( US 5970463); "Looking to manage care more closely..", Shoor, Rita, Business& Health, v11, n10, p46 (6), Sept 1993, Dialog File 149, Acc. no. 01429566.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim T. Bui whose telephone number is 703-305-5874. The examiner can normally be reached on Monday-Friday from 8:30A.M. to 5:00P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***Conclusion***

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**ALEXANDER KALINOWSKI**  
**PRIMARY EXAMINER**